# Christian Solano CSC 165 -Player Guide A2

Tested in 5029 lab machine "PONG"-before got fullscreen working.

# User Inputs Player1 -

Keyboard: Used "Razer BlackWidow Ultimate" - Tested with HID Keyboard in lab

Mouse: "Razer Lachesis 5600" - Didn't test in lab

W	Player1 Forward
S	Player1 Back
A	Player1 Move Left
D	Player1 Move Right
Mouse Right Click + Drag	Rotates the Player Left and Right
Mouse Left Click + Drag	Moves the Camera Around the Player
Escape	Quits Game

# **User Inputs Player 2-**

Game Controller - Used "Controller (XBOX One For Windows)"

Left Trigger - LT	Camera Zoom Back on Player2
Right Trigger - RT	Camera Zoom Forward on Player2
Left Analog Stick - Left, Right	Rotate Player 2 Left, Right (Inverted)
Right Analog Stick Axis- X Axis	Moves the Camera Around the Player Left, Right
Right Analog Stick Axis- Y Axis	Moves the Camera Around the Player Up, Down
Button 3 - Y	Player 2 Forward
Button 0 - A	Player 2 Back
Button 2 - B	Player 2 Right
Button 1 - X	Player 2 Left

1) To compile the program I ran it through a .bat file by using "javac a2/Starter.java". To run it used the .bat file running "java -Dsun.java2d.d3d=false a1.Starter". Ran both in PONG lab machine in the back towards the wall. Note below.

**Note:** I ran this in the lab before I had full screen working so I worked around with it. Seems to properly pick up the display.

2) The game rules are simple, move around and collect the "plants" which is the pyramids, and the sage Sphere. The pyramids are worth 1 point each and the sphere is worth 2 points. First player to reach 10 points wins, timer stops and displays final time when completed. Commands with controller and keyboard posted above.

**Note:** I had to manually look for the keyboard on my computer vs the keyboard in the lab. In the lab it was keyboard 1 and in my machine it was keyboard 6, so it was kind of troubling. If there is an issue picking up the keyboard just change the number, but it is set for the first keyboard picked up. Same issue for the mouse, I had to manually look for the mouse on my machine, but its set to the standard 1 on the program.

### **Requirements Satisfied:**

### Program 1 Stuff used

1) I created the truck by hand, vertices are are just like a cube, i removed the top to see the objects and also manually entered the triangles for the cube. Objects collected and moved toward the "truck" and are placed inside of it. The objects can be viewed from the top of the truck; once a few are collected it will keep climbing up higher and higher. Camera is good, follows correct axis. When there is an object collected, the truck will scale and change to an all white color, it reverts back after another crash.

#### Program 2 Requirements:

1) I implemented the 3rd person camera in 2 ways. For the controller (Player 2) I created my own which used the <u>Orbit system</u>. It follows the code similar to the code given in one of the class notes but I added all my inputs for the controller and had to edit the camera movement around the player. Zoom works, as well as camera orbit/ camera rotate around player. Under myGameEngine folder its Camera3Pcontroller.

The second way I implemented was with the sage function <u>ThirdPersonCamera</u> <u>Controller</u>, which is the Player1 camera controller type.

2) Split Screen is implemented and the HUD displays which player is which. Player 1 Is bottom half of the screen and player 2 is top half. HUD follows scoring and

timing where once 1 player hits the required score it stops the timer for them and continues for other player.

- 3) I used sage rectangle and used a random color code. Scaled it and rotated it under createScene method in starter.
- 4) I created a scene controller for making the "plants grow" they become too big after a certain amount of time which seems like an issue. Also created a scene controller for 'myTruck' that makes the truck spin around. Both can be found under 'myGameEngine' folder
- 5) Supported both controller and keyboard/mouse with Player 2 on 1 and Player 1 on the other. Inputs above in table.
- 6) I used the sage group to group the plants and truck. It then is used for reading the objects for crash events and for controllers. Used in 2 instances, one for truck, one for plants.
- 7) Full screen mode seems to be an issue, I didn't get it properly working when I was in the lab but I got it working on my machine. It displays an error of the display when running it but the program still runs which can be problematic possibly on another machine.
- 8) Uses same event handler from program 1, also overrides initSystem() and render().

Screenshots provided in folder.

Tested with "Controller (XBOX One For Windows)" in lab machine "PONG".